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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/508,999

09/27/2004

Shinobu Komiyama

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23117

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08/18/2008

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EXAMINER

GOLOBOY, JAMES C

ART UNIT

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1797

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/508,999	<b>Applicant(s)</b> KOMIYAMA ET AL.	
	<b>Examiner</b> James Goloboy	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008 and 14 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 54-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 54-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Applicant's amendments filed 5/14/08 overcome the rejections set forth in the office action mailed 5/14/08. New grounds of rejection necessitated by the amendment are set forth below.

#### ***Claim Objections***

2. Claim 76 is objected to because of the following informalities: Claim 76 recites "at least one metal selected from the group consisting of an oil, a soap, a metallic soap, a wax and polytetrafluoroethylene". However, oil, soap (as opposed to metallic soap), wax, and polytetrafluoroethylene are not metals. Appropriate correction is required. The examiner recommends that "metal" be changed to "additive".

#### ***Claim Rejections - 35 USC § 102***

3. Claims 54, 59, and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Okuda (JP 1-110567).

An English language abstract of Okuda, which is attached, has been used in setting forth this rejection. Okuda discloses a rust-proof pigment comprising an aluminum phosphate coated with a coating that includes a metal soap of stearic acid, such as aluminum stearate. The coated aluminum phosphate particles therefore meet the limitations of claim 54. As the particles meet the compositional limitations of claim 54, they are capable of the intended use recited in claim 59. Okuda discloses that

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particles can be blended with a solvent to make a coating meeting the limitation of claim 64.

4. Claim 54-64, 66, 68-71, and 78 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamisaka (JP 2000-154010).

An English translation of Kamisaka, which is included, has been used in setting forth this rejection. Kamisaka, in paragraphs 1 and 5, discloses a rust-proof zinc phosphate pigment with a particle size of one micron or less, within the ranges recited in claims 55, 58, and 61. In column 13 Kamisaka discloses that a dispersing agent can be added to the reaction mixture before drying, and in paragraphs 14-15 discloses that the dispersing agent can be a fatty acid. It is therefore the examiner's position that once dried, the particles meet the limitations of claims 54 and 56 where the zinc phosphate is coated by a layer of zinc soap, and will form a powder as recited in claim 59. Kamisaka also discloses that the dispersing agent can be an alkali metal or ammonium salt of the fatty acid, in which case the particles will meet the limitations of the three-layer particles of claims 57 and 60. In paragraph 20 Kamisaka discloses that the fatty acid is preferably added in an amount that will give a soap concentration within the range recited in claims 55 and 58. In the examples (paragraphs 25-27), Kamisaka teaches that the particles are formed in water and then dried, and in paragraph 12 discloses that the particles can be formed at an elevated temperature if stirring or vibrations are not added. Kamisaka therefore meets the limitations of claims 62-63.

In paragraph 22 Kamisaka discloses that the composition can be used in an aqueous system, meeting the limitations of claim 61 and forming coatings meeting the limitations of claims 64 and 66. When the particles are suspended in water, at least some of the fatty acid salt layer will redissolve, forming a coating agent meeting the limitations of claims 68-71. The metallic surfaces coated by the paints containing the particles will meet the limitations of claim 78.

***Claim Rejections - 35 USC § 103***

5. Claims 54-56 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda in view of Wasel-Nielen (U.S. Pat. No. 4,294,808).

The discussion of Okuda in paragraph 3 above is incorporated here by reference. Okuda discloses aluminum particles meeting the limitations of claim 54. Okuda also discloses a sample composition where the concentration of the metal soap coating falls within the ranges recited in claims 55 and 58. The differences between Okuda and the currently presented claims are:

i) Okuda does not disclose particles made using other polyvalent metals, including zinc.

ii) Okuda does not disclose the particle size of the particles.

With respect to i), Wasel-Nielen discloses in the abstract anticorrosive pigments made from aluminum, as in the pigment of Okuda, or other metals recited in claim 54, including zinc as also recited in claim 56. In column 2 lines 43-47 Wasel-Nielen explicitly discloses a zinc phosphate-based pigment.

With respect to ii), Wasel-Nielen discloses in the abstract that the pigment particles have a size of 20 microns (20  $\mu\text{m}$ ) at most, within the ranges recited in claims 55 and 58.

It would have been obvious to one of ordinary skill in the art to also use zinc phosphate as the nucleus in the rust-proof pigment of Okuda, as Wasel-Nielen teaches that it also has utility in such pigments. It would have been obvious to one of ordinary skill in the art to use the pigment particles in the size taught by Wasel-Nielen, as Wasel-Nielen teaches in column 3 lines 46-62 that this particle size gives improved anticorrosive properties.

6. Claims 65, 67, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamoto (U.S. Pat. No. 5,587,059) in view of Kamisaka.

In column 1 lines 42-49, Yamoto discloses an anticorrosive electrodeposition paint, and in column 6 lines 16-19 and column 8 lines 63-66 discloses that the paint is deposited in a layer with a thickness of 20 microns (20  $\mu\text{m}$ ), within the ranges recited in claims 65 and 67. Yamoto discloses in column 2 lines 56-63 that the paint can contain an epoxy resin with a weight of 1,000 to 3,000, within the range recited in claim 77. Yamoto further discloses in column 3 lines 39-42 that an additional anticorrosive pigment such as zinc phosphate can be added to the paint, but does not specifically disclose a coated zinc phosphate.

The discussion of Kamisaka in paragraph 4 above is incorporated here by reference. Kamisaka discloses a coated zinc phosphate meeting the limitations of

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claims 65 and 67. It would have been obvious to one of ordinary skill in the art to use the coated zinc phosphate of Kamisaka as the zinc phosphate in the composition of Yamoto, as Kamisaka teaches that it imparts superior anticorrosive properties and does not sediment easily.

7. Claims 72 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamisaka in view of Dalton (U.S. Pat. No. 6,015,855).

The discussion of Kamisaka in paragraph 4 above is incorporated here by reference. Kamisaka discloses an aqueous paint composition meeting the limitations of claim 68, but does not disclose composition further comprising a water soluble inorganic salt.

Dalton, in column 4 lines 24-27, discloses the addition of a silicate to water borne paint systems such as those of Kamisaka. In column 4 lines 30-36, Dalton discloses that alkali metal silicates, meeting the limitations of claim 72 are suitable silicates. The possible ratios of concentration of the silicate of Dalton plus the redissolved fatty acid salt of Kamisaka to the concentration of coated zinc phosphate of Kamisaka will encompass the range recited in claim 74, rendering it obvious.

It would have been obvious to one of ordinary skill in the art to include the silicates of Dalton in the paint composition of Kamisaka, as Dalton teaches in column 2 lines 22-25 that it imparts improved properties such as corrosion resistance.

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8. Claims 72-73 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamisaka in view of Lynch (U.S. Pat. No. 5,480,480).

The discussion of Kamisaka in paragraph 4 above is incorporated here by reference. Kamisaka discloses an aqueous paint composition meeting the limitations of claim 68 but not further comprising a smectite clay, an organic acid salt meeting the limitations of claim 73, or an inorganic salt meeting the limitations of claim 72.

Lynch, in column 1 lines 19-22, discloses a paint. In column 16 lines 1-3 Lynch discloses that the paint contains a clay, and in column 16 line 7 discloses that the clay can be smectite, as recited in claim 75. In column 16 lines 20-29 Lynch discloses that the clay is used in combination with a water soluble peptizing agent, and that suitable peptizing agents include sodium silicate, meeting the limitations of claim 72, and sodium citrate, as recited in claim 73.

It would have been obvious to one of ordinary skill in the art to include the smectite clay of Lynch in the paint composition of Kamisaka, as Lynch teaches that it is a useful paint additive, and it would have been obvious to further include sodium silicate or sodium citrate, as Lynch teaches that the salts interact with the clay to form a stable aqueous dispersion.

9. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamisaka in view of Miyata (U.S. Pat. No. 4,761,188).



The discussion of Kamisaka in paragraph 4 above is incorporated here by reference. Kamisaka discloses an aqueous paint composition meeting the limitations of claim 68 but not further comprising a smectite clay.

Miyata, in column 5 lines 49-55, discloses “known paint additives”, including smectite clay as a thickening agent. The addition of the smectite clay to the composition of Kamisaka will meet the limitations of claim 75 as the possible ratios of smectite concentration to coated zinc phosphate concentration will overlap the range recited in claim 75.

It would have been obvious to one of ordinary skill in the art to include the smectite clay of Miyata in the paint composition of Kamisaka in the case where a thicker paint is desired.

10. Claim 76 rejected under 35 U.S.C. 103(a) as being unpatentable over Kamisaka.

The discussion of Kamisaka in paragraph 4 above is incorporated here by reference. Kamisaka discloses an aqueous paint composition meeting the limitations of claim 68, and in paragraph 22 discloses that the paint can be an emulsion, implying that it will have an oil phase in addition to the water phase. Oil meets the limitations of the auxiliary lubricating ingredient of claim 76. While Kamisaka does not explicitly disclose the ratio of oil to zinc phosphate, it is clear that the range of possible ratios will encompass the range recited in claim 76. See MPEP 2144.05(I): “In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie

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case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976);”

### ***Response to Arguments***

11. Applicant's arguments with respect to have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797